

ABSTRACT: **Aremac-based means and apparatus for interaction
with computer, or one or more other people, through a camera.**

A new kind of display means and apparatus called an aremac is provided. The aremac may either be worn upon the body, such as in a pair of eyeglasses, where it can direct light into an eye of the wearer of the apparatus, or it may be located together with a fixed camera to direct light onto a three dimensional scene or objects. The typical application of the aremac is that of collaborative photography, in which a remote director assists a photographer in composing a picture, or arranging lighting in a photographic studio while the remote director remotely views the scene through the photographer's camera. In a wearable embodiment, the camera is effectively imaged inside an eye of the wearer so that the remote director can view the light rays passing through an eye of the wearer of the apparatus and the director can write on the retina of the wearer of the apparatus by pointing a laser beam at the screen in the director's office, which teleoperates a miniature laser beam directed through the wearer's eye lens onto the retina of an eye of the wearer in such a manner that when the director points at an object in the scene, the wearer of the apparatus sees a red dot at the corresponding location on that same object. In another embodiment, the remote director can point to objects in the photographer's studio by pointing a laser beam at a projection screen which displays images of these objects in the photographer's studio, where the director's laser pointer remotely controls a teleoperated laser pointer in the photographer's studio.